

F16. 1.

First-Level Name Table

Human-readable request name (First Level Name)	Low-level Data Objects				
	Root Object (priority=1)	Other Data Objects (In order of Priority)			
URL1	5	12, 2, 6, 4, 16			
URL2	10	3, 4, 82			
URL3	9	12, 4, 15			
URL4	9	3, 4, 15			
•••		••••			
URL_n	3	12, 4, 2, 17			
nickname1	5	12, 2, 6, 4, 16			
nickname2	5	12, 2, 6, 4, 16			
•••		•••			
nickname_m	3	12, 4, 2, 17			

LOW-LEVEL DATA OBJECT LOCATOR TABLE

Data	Total	Size	Band-	Protocol	Location
Object	number	(bytes)	width	Туре	·
Name	of Time		(Kbit/s)		
(integer)	Object			0.1000	Protocol type=MPEG: TransportID(tuner
	is sent			0=MPEG; 1=Multi-	freq) .programID.tableID.extendedtableID
			,	cast IP	Protocol type=Multicast IP: Multicast IP
					address, UDP Port Number, Extended
					Table ID
1	10	1880	2	0	16.14.06.01
2	5	564	4	0	5.12.12.22
3	10	564	2	0	6.07.07.01
4	2	1128	1	0	3.06.07.01
12	2	564	2	1	225.0.0.1, 500, 1000
15	3	188	. 6	0	1.02.07.01
18	15	1504	12	0	3.06.07.02
•••		•••		•••	

SAMPLE PROCESS FLOW DIAGRAM FOR OBTAINING THE FIRST-LEVEL NAME TABLE

Tune to home frequency on power up 410 Obtain the First-level Name Table from the data stream on home channel, and store on receiver. Receiver retains this information on channel switch. 420 Upon channel switch (tuner tuned to another channel), obtain the First-level Name Table for this channel,

and append to previous First-level Name Table 430

SAMPLE PROCESS FLOW DIAGRAM FOR OBTAINING A LOCATOR TABLE

Tune to home frequency on power up 510

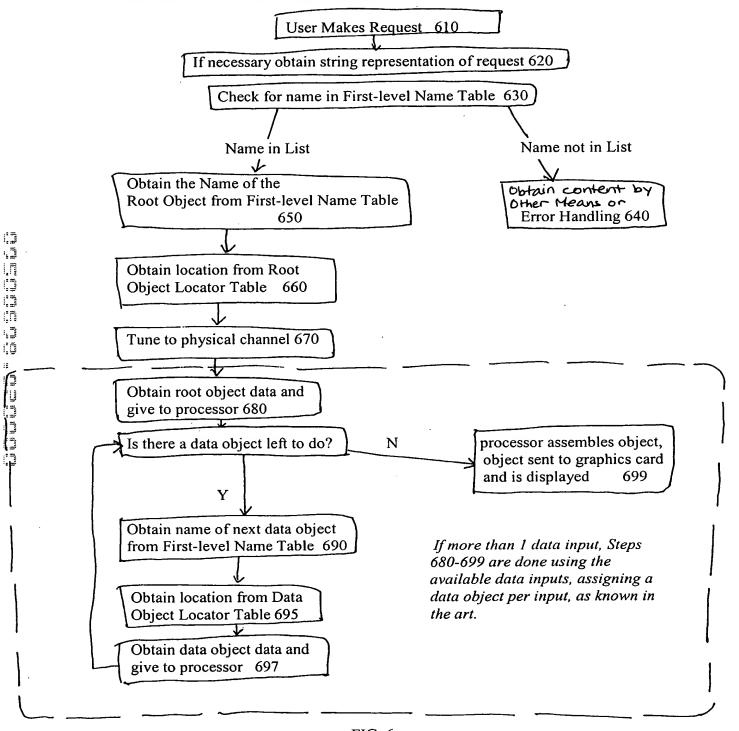
Obtain the Location information from the data stream on home channel, and store on receiver.

Receiver retains this information on channel switch.

Upon channel switch (tuner tuned to another channel), obtain the Location information for this channel, and append to previous Locator Table

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PROCESS FLOW DIAGRAM FOR RESPONDING TO A USER REQUEST



Schematic Drawing of a Root Object a "redball.gif" Textstring Hypertext link to "blueball.gif" another screen this request object (multi-screen object Hypertext Link to alternative embodinert) a web page not in this request object (triggers a new user request)

FIG. 7



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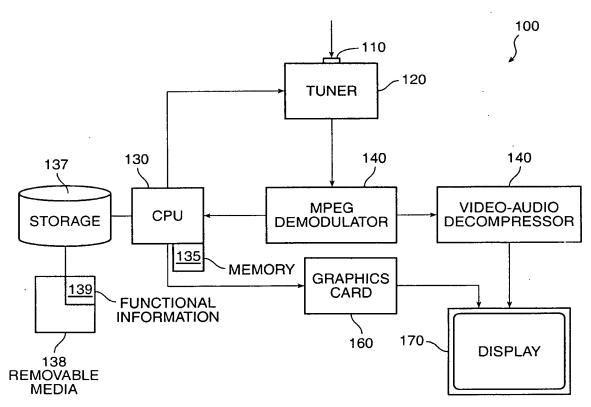


FIG. 1

FIRST-LEVEL NAME TABLE

FIRST-LEVEL NAME TABLE							
HUMAN-READABLE REQUEST NAME (FIRST LEVEL NAME)	LOW-LEVEL DATA OBJECTS						
	ROOT OBJECT (PRIORITY=1)	OTHER DATA OBJECTS (IN ORDER OF PRIORITY)					
URL1	5	12,2,6,4,16					
URL2	10	3,4,82					
URL3	9	12,4,15					
URL4	9	3,4,15					
•••		•••					
URL_n	3	12,4,2,17					
NICKNAME1	5	12,2,6,4,16					
NICKNAME2	5	12,2,6,4,16					
	•••	•••					
NICKNAME_m	3	12,4,2,17					

FIG. 2



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LOW-LEVEL DATA OBJECT LOCATOR TABLE	LOCATION	Protocol Type=MPEG: TransportID (tuner freq).programID.tableID.extendedtableID	Protocol Type=Multicast IP: Multicast IP address, UDP Port Number, Extended Table ID	16.14.06.01	5.12.12.22	6.07.07.01	3.06.07.01	225.0.0.1,500,1000	1.02.07.01	3.06.07.02	•••
	PROTOCOL TYPE	0=MPEG; 1=MULTI- CAST IP			0	0	0	ļ	0	0	•
	BAND- WIDTH (KBIT/s)			2	4	2	1	2	9	12	•
	SIZE (BYTES)				564	564	1128	564	188	1504	•••
	TOTAL NUMBER OF TIMES OBJECT IS SENT			10	2	10	2	2	3	15	•••
	DATA OBJECT NAME (INTEGER)				2	က	4	12	15	18	•



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SAMPLE PROCESS FLOW DIAGRAM FOR OBTAINING THE FIRST-LEVEL NAME TABLE

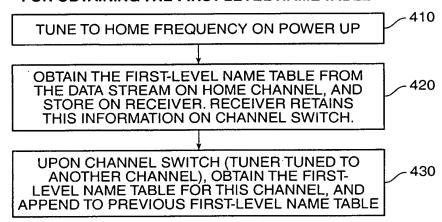


FIG. 4

SAMPLE PROCESS FLOW DIAGRAM FOR OBTAINING A LOCATOR TABLE

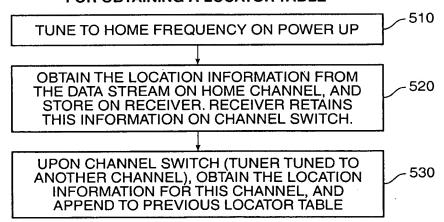


FIG. 5

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PROCESS FLOW DIAGRAM FOR RESPONDING TO A USER REQUEST 610 **USER MAKES REQUEST** 620 IF NECESSARY OBTAIN STRING REPRESENTATION OF REQUEST 630 CHECK FOR NAME IN FIRST-LEVEL NAME TABLE NAME NOT IN LIST NAME IN LIST -640 -650 OBTAIN THE NAME OF THE **OBTAIN CONTENT BY** ROOT OBJECT FROM OTHER MEANS OR **ERROR HANDLING** FIRST-LEVEL NAME TABLE 660 **OBTAIN LOCATION FROM** ROOT OBJECT LOCATOR TABLE **∽670** TUNE TO PHYSICAL CHANNEL 680 OBTAIN ROOT OBJECT DATA AND GIVE TO PROCESSOR -699 PROCESSOR ASSEMBLES THERE Ν **OBJECT, OBJECT SENT** A DATA OBJECT LEFT TO DO TO GRAPHICS CARD AND IS DISPLAYED **OBTAIN NAME OF NEXT** 690 DATA OBJECT FROM FIRST-LEVEL NAME TABLE IF MORE THAN 1 DATA INPUT. STEPS 680-699 ARE DONE -695 **OBTAIN LOCATION FROM DATA** USING THE AVAILABLE DATA **OBJECT LOCATOR TABLE** INPUTS, ASSIGNING A DATA OBJECT PER INPUT, AS

FIG. 6

OBTAIN DATA OBJECT DATA AND GIVE TO PROCESSOR - 697

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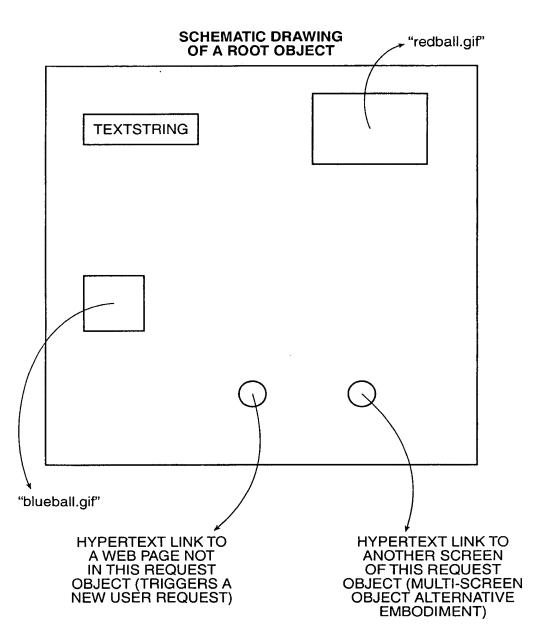


FIG. 7